

Mathematics & NSA: A Long Term Partnership



2001

Summer Institute

for

High School

Mathematics Teachers

High School mathematics and science teachers are invited to apply to attend the 2001 National Security Agency (NSA) Summer Institute:

- Held **June 25-29, 2001**
- Hosted by **Howard County (Maryland) Public Schools**

Successful applicants:

- **Learn and apply** the latest techniques for mathematics classrooms
- **Co-author** learning units for publication and distribution nationwide
- Receive a **stipend** of **\$500**
- Receive **free** manipulatives and other valuable **educational materials**
- May receive **inservice** credits
- Receive a **continental breakfast and lunch** each day

Participants can expect to work hard and have fun in a **professional, energetic, fast-paced environment**. The enclosed application must be postmarked **no later than 20 April, 2001**.

WHAT IS THE SUMMER INSTITUTE FOR MATHEMATICS TEACHERS?

In partnership with Howard County Public Schools, the National Security Agency's Mathematics Education Partnership Program sponsors Summer Institutes for Mathematics Teachers (SIMT). These Institutes provide teachers an **intensive five-day opportunity** to learn and apply the **latest techniques for mathematics classrooms** using a wide variety of methods and technology.

During the week-long institute participants will **attend one of the following four strands**:

- Cabri Geometry on the TI-92 - Using technology to facilitate geometry exploration, application, and in-depth understanding.
- TI Calculator-Based Laboratory (CBL) and the TI-83 Graphics Calculator - their use in collecting and analyzing data in the mathematics classroom.
- Mathematical Modeling - developed by the Consortium for Mathematics and Its Applications (COMAP) to help students in grades 9-12 understand how to build and apply a variety of mathematical models to solve real-world problems.

In addition, participants will attend **special lectures** by NSA mathematicians on topics such as cryptanalysis, probability, and statistics.

Participants will be part of a team that will **develop a learning unit (with a complete assessment section)** designed to incorporate the Maryland State Core Learning Goals and the NCTM Standards. NSA maintains ownership of the learning units and publishes and distributes them free-of-charge, upon request from educational institutions. The learning units may also be available via the Internet.

Participants will be **required** to attend **two follow-up sessions**, one in the fall and one in the spring (probably Nov. 27, 2001 and March 19, 2002). During these sessions, they make final changes to the learning units, hear guest speakers, and present the learning units to the Institute.

Participants will receive a **\$500.00** stipend if they complete the entire 40-hour program during the summer and provide a learning unit suitable for review by representatives of the Maryland Council of Teachers of Mathematics. After attending both follow-up sessions, participants may receive **inservice credits** depending on the requirements of their state (MSDE has approved 3 inservice credits).

HOW CAN YOU BE A PART OF THE 2001 SIMT?

High School mathematics and science teachers are invited to apply. We are looking for both experienced and novice teachers from both public and private nonprofit schools. Most importantly, we are looking for teachers who are excited about teaching, who work well with others, and who like to participate!

THE NEXT STEP

The **enclosed application** must be completed, signed by both you and your principal, and returned **no later than 20 April 2001**. Neatness and thoroughness count! Incomplete applications will not be considered. You may attach one of your lesson plans or units as an example of your writing and planning skills.

Application

2001 High School Summer Institute for Mathematics Teachers

PLEASE TYPE OR PRINT CLEARLY

1. Name _____
title last first initial

2. School where employed

_____ name of school street address
Public _____
Private _____ city/state/zip code
_____ county where school is located (area code) telephone number e-mail address

3. Residence

_____ (area code) telephone number street address
_____ city/state/zip code

4. Male/Female _____ Social Security Number _____

5. US Citizen? Yes _____ No _____ Date of Birth _____

6. Ethnicity African American _____ White _____ Hispanic _____ Native American _____
Asian/Pacific Islander _____ Other (Specify) _____

7. Number of years high school teaching experience _____

8. Highest degree earned _____ area of specialization _____

9. Course(s) taught 2000-2001 school year _____

10. Have you ever attended a SIMT? _____ If yes, when? _____
Which strand did you attend? _____

11. Please indicate your preferences among the three strands being offered. Place a "1" by your first choice, "2" by your second choice, and "3" by your third choice.

_____ Cabri Geometry on the TI-92
_____ The TI Calculator-Based Laboratory (CBL) and the TI-83 Graphics Calculator
_____ Mathematical Modeling

Detach here

12. Continuing Education On a separate piece of paper, list continuing education programs specifically for mathematics or science faculty that you have attended (mark with * any you directed) within the past five years. Describe your leadership roles. Give host institution, type of program (e.g. courses, research, etc.), length of program, and year of program.

13. Reasons for Participating On a separate sheet of paper, state your plans and goals for enhancing high school mathematics or science education and your reasons for participating in this institute.

14. Support of Administration Your school principal must sign the following for you to be considered for the Institute:

I recommend this applicant for participation in the Institute. After completion of the Institute, I will support the applicant's efforts to convey the results of the institute to other teachers at my school *and I will support the applicant's attendance at the two follow-up sessions*. I understand that in order to be eligible for MSDE credits, the applicant must attend these follow-up sessions and that NSA will provide no reimbursements for substitutes. (Teachers from states outside the mid-Atlantic region are not required to attend the follow-up sessions if they are not interested in receiving MSDE credit). I also consent to the inclusion of my school's name and phone number on this applicant's learning units, which will be published and distributed by NSA, both in paper copy and on the Internet.

Principal's signature _____

Principal's name (printed) _____

15. Applicant Consent Statement You must sign the application to be considered for the institute.

I consent to NSA's ownership, publication, and distribution, both in paper copy and on the Internet of the learning units I write, to include my name, school name, and school phone number. I also consent to NSA's producing and using photographic or videotape images of me for purposes of including such images in informational packages regarding these institutes.

PRIVACY ACT STATEMENT: Auth: 10 U.S.C. § 2193; SSN: EO 9397. **PURPOSE:** administer cooperative agreements with area schools. **ROUTINE USES:** disclosure to (1) agency officials administering the program, (2) school cooperative agreement administrators and (3) teacher participants (contact information only). Disclosure of the information, including Social Security Numbers, is voluntary. Failure to furnish the requested information may result in non-selection, non-participation, or non-payment in the program. Your signature indicates you have read and understand the above.

Applicant's signature _____

Application must be postmarked by **April 20, 2001**. Send to:

**National Security Agency
9800 Savage Rd. Suite 6217
Ft. Meade, MD 20755-6217
ATTN: Bob Cowles, Room 2B5030**

Applications can be faxed to the MEPP at 301-688-4980, Attn: Bob Cowles
MEPP can be contacted via e-mail at the address AJrkcw@fggm.osis.gov